

ABSTRACT

A method for transferring of individual devices or circuit elements, fabricated on a semiconducting substrate, to a new substrate and placing said devices and elements in predetermined locations on the new substrate. The method comprises shaping the devices and circuits as truncated cones, lifting them off the original semiconducting substrates and depositing them en masse onto the new substrate, followed by their placing into receptors on the new substrate. The new substrate has preliminarily made receptors in a form of a truncated cone and the devices and circuits fill these receptors. Both the receptors and the devices and circuits have metallization contacts enabling to establish electrical contact between them. A method for real-time monitoring and verification of correctness of placement of the devices and circuits into the receptors by applying voltage pulse waveforms and measuring the resulting current pulse.

ETHOD FOR TRANSFERRING OF INDIVIDUAL DEVICES OR CIRCUIT ELEMENTS